

Problem Set - 1

Introduction

Welcome to the first problem set of MLOO1! First of all I congratulate you for starting studying from this course and attempting your first problem set. In this problem set you will find some problems to do by yourself.

This problem set will test your skills based on section-1, so I highly recommend you to first watch section-1 and then start with this assignment.

Problems

- 1.) What do you think machine learning is? It will be better if you explain what you think?
- 2.) This is a formal definition by Tom Mitchell:-
A computer program is said to learn from experience E with respect to some class of tasks T and performance measure P , if its performance at tasks in T , as measured by P , improves with experience E .
- 3.) Do try to understand this definition about ML and explain with the help of an Email spam detection example, meaning What is E in spam detection, what T in spam detection and what is P in Spam detection.
- 4.) What are some types of machine learning and can you say these types with the help of examples?
- 5.) Write 10 real world machine learning applications? Be sure to do the research and can you say in what way it will benefit the world?
- 6.) Let's take one scenario you're working on house price prediction, so assume that you're given size of the house, # of fans, # of bedrooms and basis on these you have to predict the price, so can you say what are X 's here and what is y ?
- 7.) What x 's are called Independent and y 's are called dependent variables?
- 8.) Write a formal definition of Supervised & Unsupervised Learning with examples.

Submission Guidelines:-

You have to submit it through our official discord server and forms are provided on the course website to submit your problem set and you can discuss your answers in the discord community.